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# Montana & Views

Information Services Division

A Newsletter Dedicated To Information Technology In The State Of Montana

Montana State Library

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## Livestock Brands System Image Project

The Livestock Brands System provides for the automated capture, maintenance, and retrieval of information on all brand owners and recorded brands in the state of Montana. This system was initially implemented in late 1980.

Part I of a two part enhancement project was undertaken in the middle of 1989 with the objective to create and store an image of each of the 26,000+ unique brands and to print these brand images on various documents using the Department of Administration's laser printer. Part II of the project is to display the images when ownership information is retrieved on-line. It will be in production this spring.

The Brands System is available for on-line access at fifteen markets across the state and for employees located in Helena. The system tracks

brands as they are issued, transferred, and rerecorded. The system also maintains mortgage information on recordings.

Brand inspections are required for cattle, horses, and sheep before livestock leave Montana, cross county lines, change ownership, or are slaughtered. The latest system enhancements will allow personnel to visually compare a brand on an animal to a picture of the brand on a document or on the computer screen. The Department of Livestock expects this project will improve the efficiency and accuracy of ownership verification.

By entering the complete brand-id, the system will display a picture of the brand, owner name and address information as well as any identifying marks, counties of range, mortgages, bill of sale signers, and other recordings of the same brand. Based on entering a partial brand-id, the system will display a picture of a particular brand and all the types of livestock and positions recorded along with owner and address information.

All official brand certificates and rerecord notices are printed by this system. Numerous reports are printed that benefit livestock markets, inspectors, lending institutions, and the public.

Almost all reports have a picture of the brand along with ownership information.

If you would like more information about this system, please call or ZIP!Mail Carol Robocker-Andersen (444-5210) or Kathy Rader (444-3724) at the Department of Livestock.

*"By entering the complete brand-id, the system will display a picture of the brand, owner name and address information as well as any identifying marks, counties of range, mortgages, bill of sale signers, and other recordings of the same brand."*



## **Network Outages**

Network Outages!!!! OUCH!!! We understand that nobody wants to hear those words, but unfortunately we do need to plan outages in order to perform maintenance and apply new and better enhancements to the system. However, we want to be certain we are providing advance notification to all of you when we have a planned outage. To accomplish this, ISD will be putting out a broadcast message in SuperSession and in TSO informing you of the date, time and anticipated duration of the outage. Additionally, we will continue to call agency network managers to alert them to the scheduled outage.

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However, as you know, sometimes "things go bump in the night" and outages do occur which certainly are not planned. When this happens, we want to make a concerted effort to alert each of you as quickly as possible, short of calling and waking you up in the middle of the night, of course.

In order to accomplish this, ISD needs to update its list of agency contacts and, in the near future, will be sending a letter asking you to identify a primary and secondary contact person to be informed of network outages. Once we have this information, we will initiate a process to alert you of outages via voice mail, ZIP!Mail or telephone contact. Additionally, the ISD Customer Support Center phone number (444-2000) will report a message of any outages/problems occurring and the anticipated duration. This message will be updated as the status of the situation changes or until such time as it is resolved.

We hope that together we can develop a notification process when things do in fact "go bump in the night" and look forward to working with you toward this end.



## **MOPUG March Meeting**

The Montana Oracle/PowerBuilder User Group (MOPUG) March

meeting was canceled. The schedule for that meeting was to include a demonstration of PowerBuilder applications. However, the demonstration was rescheduled for their next meeting on April 7, 1995. The MOPUG group meets at 9:00 a.m. in Room 210 at the Helena College of Technology.

Anyone using Oracle or PowerSoft products is welcome to attend. For additional information please contact Carl Jarrett (444-0981).

### **Calendar of Events**

**April 5:**  
Information Technology Managers Group (ITMG) meeting, 1:15-3:15, DNRC Conference Room.

**April 7:**  
Oracle/PowerBuilder User Group (MOPUG) meeting, 9:00-12:00, Helena College of Technology.

**April 14:**  
GIS Seminar - Duane Lund, Montana State Library GIS Program, will talk about the USFS Region I Ecosystem Inventory & Analysis. Montana State Library Conference Room 208. Questions - call Kris Larson (444-5691).

**May 3:**  
Information Technology Managers Group (ITMG) meeting.

**May 8:**  
1995 Montana GIS Pre-Conference Workshops, Best Western Colonial Inn, Questions - call Kris Larson (444-5691).

**May 9:**  
Information Technology Advisory Council (ITAC) meeting, 8:30-12:00, DNRC Room 111.

**May 9-10:**  
1995 Montana GIS Users' Conference, Best Western Colonial Inn, Questions - call Kris Larson (444-5691).



## **Internet... The Series Navigating (Surfing) the Net**

As discussed in one of our earlier articles, the Internet is simply a network that links a large collection of computer resources. Therefore, while the Internet provided the means by which individuals obtain their respective information, the information actually originated from a computer(s) somewhere in the Internet universe.

Internet resources can be conceptually separated into three categories: communications, data, and navigation. The communications category includes services that allow users to communicate with one another over the Internet; the data category covers the actual information obtainable using the Internet; and the navigation category encompasses tools that assist users in locating and retrieving this information over the Internet. We will discuss the communications and data categories in future articles.

Navigation tools provide users with the ability to move around the Internet and retrieve information. The importance of these tools cannot be understated. The difficulty incurred in navigating around the vast array of computers connected to the Internet would quickly outweigh the value of the Internet's information resource were it not for navigation tools.



### **Telnet**

Telnet is a computer program that establishes a connection between two computers on the Internet, essentially the computer equivalent of a telephone call. If the user knows the electronic address of the desired computer, they simply give the address to the telnet program and it makes the connection.

It is important to note that a telnet connection to a host computer does not necessarily mean access to the host's



resources. Once the connection is established, an individual can expect to be queried for a user identification and password. If the individual is not authorized to use the host computer, the telnet connection will be terminated. However, some computers will allow the individual to gain access by registering as a new user.



### **FTP**

While *FTP* stands for *file transfer protocol*, it is actually just a computer program used to download files from a host computer. Many computers on the Internet contain archives of files that are available for downloading. These computers are known as *FTP servers*.

Not all FTP servers permit public access. Access will be denied if a user is not authorized to use a particular FTP server. However, there are a significant number of FTP servers that provide for public access using *anonymous-FTP*. These servers are referred to as *anonymous-FTP servers* and allow users to logon with the user identification of "anonymous" and their e-mail address as the password.

There are thousands of anonymous-FTP servers and an exponentially greater number of files. Unless the user knows which anonymous-FTP server holds a desired file, the search for the right server becomes a needle-in-a-haystack adventure.



### **Archie**

Luckily, there is *Archie*, a computer program that assists in the location of files on anonymous-FTP servers. The name "Archie" comes from its similarity to the word "archives" (archives of files). The use of "Archie" led to the use of other *Archie Comic Strip* names such as "Veronica" and "Jughead" for other Internet navigation resources. The Archie program searches a database of anonymous-FTP servers and a catalog of their respective files and tells the user on what anonymous-FTP server a particular file is stored.

The Archie program and the database of anonymous-FTP servers and files are stored on computers called *Archie servers*. There are three ways to access the Archie program. The first is to telnet to an Archie server and run the Archie Program. The second is to run an *Archie client*, a program on the user's machine that connects to an Archie Server and initiates the Archie program. The last way is to send an e-mail request to an Archie server -- the Archie server will carry out the request and send the response back.



### **Gophers**

*Gophers* are probably the most popular tool for navigating the Internet. Like most other Internet tools, gophers are based on a client-server relationship. The gopher program running on a user's computer is called a *gopher-client*. If it becomes necessary for a gopher client to obtain information from another computer (such as a different gopher menu), that computer is referred to as the *gopher-server*.

A simple menu appears when a user runs his gopher-client. The user has only to choose from the available options and

the gopher does the rest, making the necessary telnet connections, retrieving files from anonymous-FTP servers, etc.

A gopher menu selection request can be made according to resource subject, location, or specific information. For example, a user wishing to uncover information on the subject of the law would select "Other Gophers, Legal." This selection would result in a new menu listing of gophers with a legal emphasis. These gophers could then be used to assist the user in accessing particular legal resources.

The user can also use a gopher to access a particular location. By selecting the University of Minnesota Gopher (the gopher program was first developed at the University of Minnesota, home of the Golden Gophers, hence the name Gopher) from the menu, the user's gopher-client will connect with Minnesota's gopher-server and obtain a copy of its gopher menu. Selecting the option "Gophers of France" will result in a menu listing the different gopher locations throughout France. The user can then select the particular French gopher they are looking for. All this navigation is of little use, however, if it does not eventually lead to information. Fortunately, most gopher servers do provide the user with direct access to information.

Many universities, companies and other organizations have gopher servers, generally dedicated to their respective organizational interest or purpose. Since most gophers offer other gophers as menu selections, however, access to these dedicated gophers usually will provide passage to the entire universe of gophers, known as *gopherspace*.



### *Veronica*

Gopherspace is a really big place (The Enterprise's mission: to go where no gopher has gone before), so further navigational assistance can be helpful. This assistance comes in the form of *Veronica*, a gopher-based tool that allows a user to search gopherspace for all menu items that contain specified words. The user would select the "Search Gopherspace With Veronica at UOP" option (Not all gopher servers support *Veronica*, so it is sometimes necessary to telnet to another gopher-server). The user's gopher-client would then access the gopher-server at the University of the Pacific and return with a menu.

A user needs only to enter the keywords to be searched and *Veronica* goes into gopherspace and returns with any gopher menu options containing the keywords. *Veronica* can be thought of as the *Archie* for gopher servers.



### *Jughead*

This is another gopher-based tool similar to *Veronica* except it is used to search only a limited portion of gopherspace. Different gophers have different *Jugheads*, which are limited to different portions of gopherspace, so a little navigation may be necessary to find the right *Jughead*. Again, *Jughead* is similar to *Veronica*, except *Jughead* is used to search for files on just one gopher.



### *WAIS*

A more powerful tool to search for files on the Internet is the Wide-Area Information Server (WAIS). WAIS operates under a client-server

relationship and provides the user with an interface for conducting searches. As opposed to *Archie*, *Veronica*, and *Jughead*, the primary advantage of using WAIS is that it is not dependent on a catalog of files. Instead, WAIS has the capability of performing a search on words contained in a document rather than just the title.



### *World Wide Web*

The World Wide Web is best described as a real nifty gopher, a tool that enables the user to navigate both the Internet and actual information resources. The Web's power is derived from its use of *hypertext* and *hypermedia*. Hypertext is information in the form of text that contains hidden links to other information or information resources. Within a hypertext document, hypertext links are the words and phrases that are highlighted in some way (e.g., underlined, shadowed, etc.). In this regard, hypertext is comparable to a footnote. When a reader encounters a footnote, they move to another part of the document to read the footnote. When a user is reading a document and encounters hypertext, they select the hypertext word or phrase (generally using a "point and click" device such as a mouse) and is taken to another document or computer resource containing information related to the hypertext. Currently all Web servers run software that supports HTTP (hyper-text-transport-protocol).



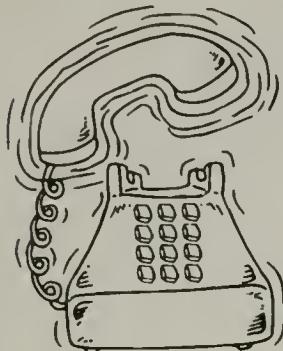
### *Mosaic*

The Web itself is composed of servers that contain documents with hypertext and hypermedia links. To navigate through these Web servers requires a *browser*. The browser acts as an interface between the user, the document and other Web resources. In this respect, the browser is very much like a gopher. Though there are many browser programs available, the most popular one is *Mosaic*, a product of the National Center for Super-computing Application (NCSA), which has come to be the standard for the prevalent *GUI* style of access to the Internet. Mosaic is a high-end browser known for its ability to both display hypermedia pictures and allow users to annotate documents with their own hypertext and audio.

At present the *Mosaic* name has been licensed to several commercial organizations. The consequence being that several *Mosaics* can be expected to appear in the marketplace along with the NCSA version. A key factor to remember is that the functionality of any *Mosaic* style client front-end is that it adhere to HTML (hyper-text-markup-language) standards. This guarantees usability within the world wide web information delivery architecture.

When considering the complexities of navigating the Internet the words from Arthur C. Clarke seem profound when he said, "Sufficiently advanced technology is indistinguishable from magic."

## Calling The Mainframe, Anyone?



### Dialing-Up the Mainframe

Those of you who access the mainframe, via ISD's dial-up modem pool, *may have* recently experienced erroneous responses, possibly erroneous data, and frequent disconnects. Multitech Tech Support (the modem company) was as baffled as we were when attempting to isolate the cause of the problems we were experiencing.

Never fear, the fix is here (and it has already been installed)! Multitech Systems Incorporated shipped 48 EPROM's to upgrade our mainframe modem pool. The upgrade installation took place on March 15, 1995.

If you are still experiencing *any* problems dialing into the modem pool, please document your attempts by providing the following information:

- Time of day
- Phone number dialed
- Your modem settings (e.g. data bits = 8, stop bits = 1, parity = no parity, flow control = X-ON & X-OFF on, baud rate = 19200 bps, terminal emulation = VT100, etc.)
- Application attempting to access
- Symptoms (i.e.; what exactly is

happening when you attempt to dial-in and the sequence of events)

- Status of modem lights (LEDS) during attempted dial-up (e.g. RD=Flashing, TD=flashing, CD=constant, 9600 bps light flashing, etc.)
- Copy of your modem's physical strap settings *if possible* (ATL5,L6,L7, or equivalent)

Please send the above mentioned information via ZIP!Office/ZIP!Mail to Mike McCracken or Dave Frankl ASAP! If you do not have ZIP! access, please call Mike (444-2510) or Dave (444-2820) with the information. Problems will be dealt with on a case-by-case basis with assistance from Multitech Technical Support in Minneapolis as needed.



### NetWare Managers Group Highlights

The NetWare Managers Group (NMG) meets every Friday at 9:00 a.m. in Room 13 of the Mitchell Building. All agency LAN administrators and alternates are welcome to attend. The group works on issues relating to the "enterprise" nature of NetWare 4.x and the state's implementation.

- The latest diagram of the NDS (NetWare Directory Services) is

available from the ISD LAN Operations group. Call Andy Quist (444-5552) to receive a copy.

- A 4.1 test group has been established and consists of approximately ten servers from six agencies in at least four buildings on the campus. This participation will result in realistic testing of the migration from 4.02 to 4.1.

*"All agency LAN administrators and alternates are welcome to attend. The group works on issues relating to the "enterprise" nature of NetWare 4.x and the state's implementation."*

- NMG has established a subcommittee to evaluate backup software options for NetWare. It will be important to have standard backup procedures for the enterprise. Several agencies have expressed interest in the evaluation: Fish, Wildlife and Parks, Social and Rehabilitation Services, Family Services, Labor and Industry, Revenue, Secretary of State and ISD. Thanks to all volunteers.

- Some new documentation is available on the Value-Added Server:

- Proteon LAN drivers on DOA\_VAS\_001. Call Andy (444-5552) if you have trouble locating them.
- Generic samples of CONFIG.SYS, AUTOEXEC.BAT and NET.CFG for networked workstations running VLM's are available on:  
DOA\_VAS\_001\SYS:GUEST\NOVELL\WINDOWS\NETWORK\NETFILES.DOC

For more information on the NMG, call Dawn Sullivan (444-2974) from the LAN Operations group.

## State Telephone Rates

As can be seen in Chart 1, the average long distance rate charged by the State Telephone Network has been decreasing steadily since fiscal year 1990. Currently, the rate is an average of 18¢ per minute which will fall to an estimated average of 14.1¢ per minute in fiscal year 1997.

Telephone equipment rates have also been decreasing steadily since fiscal year 1990, as shown in Chart 2. Currently, the monthly rate is \$18 for an SL-1 phone and \$14 for a 2500 phone. These rates will continue to decline to an estimated monthly rate of \$17 and \$13, respectively.

## State Telephone Network

### Average Long Distance Rate

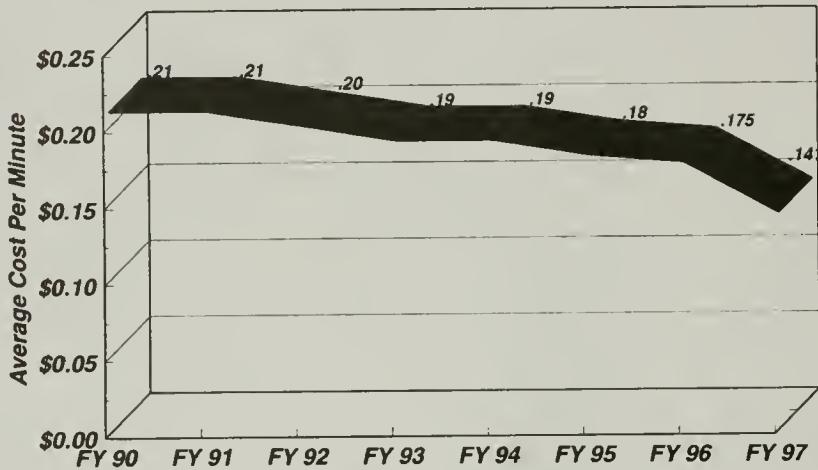


Chart 1

## Telephone Equipment Rates

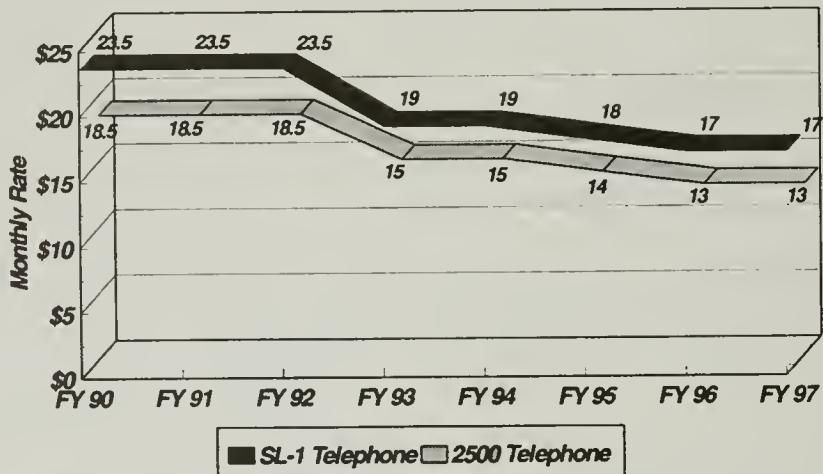
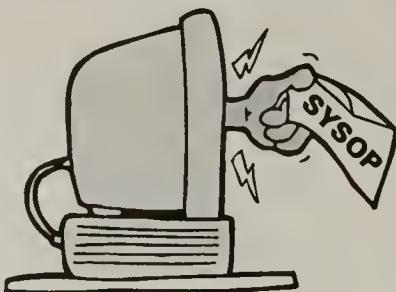


Chart 2



## From the Sysop's Corner...

There are several items that have happened in the past month relating to the State BBS. Here's a quick summary:

- Four additional lines were added to handle the large volume of calls we have been receiving. The board received 12,000 calls in January and 10,000 calls in February. There are now 12 lines available for users to dial into.
- We upgraded the BBS Software to accommodate the additional lines. We are now running a 100 user version of PCBoard 15.2.
- UPLOAD.EXE has been revised. This was done to fix some problems which were occurring on a fairly regular basis. The following items have been fixed or changed:
  - Permits the uploading of multiple files in one session.
  - Requests the full name and password of the user once per session. (No more typing it in for every upload).
  - Handles files with .WK1, .WK3, .WK4, .W50, .W51, .W60, and .TXT extensions.
  - Automatically includes .FMT and .FM3 (lotus format) files.
  - Gives you a description of the area you are uploading to when you type the area number.

- Takes less memory.
  - A problem with uploads occasionally going into the wrong agency's area has been fixed.
  - Problems related to getting an incorrect list of conferences you have been authorized to upload to has been fixed.
  - Temporary files are now written to a directory based on where the TEMP or TMP environment variables are set. If neither of these variables are present, then it writes the temporary files to the default directory.
  - Doesn't leave .ZIP files after an upload.

Please note that you MUST be using the newest version of UPLOAD to be able to post files on the BBS.

Also, users which are uploading files VIA MODEM to the BBS should continue to use the old version of UPLOAD.EXE until further notice.

For your reference, the current versions of STATEBBS and UPLOAD are:

UPLOAD.EXE 204,892 02-09-95 8:55a  
STATEBBS.EXE 81,005 10-07-94 4:42p

These are available on DOA\_VAS\_001, in the directory SYS:GUEST\BBSDISK.

**"Four additional lines were added to handle the large volume of calls we have been receiving. The board received 12,000 calls in January and 10,000 calls in February. There are now 12 lines available for users to dial into."**

If you have any questions about the State BBS, contact Forrest Christian (444-2921).

## **1995 Montana GIS Users' Conference, May 8 - 10, Colonial Inn, Helena, Montana**

This year's conference will focus on bringing together examples of how the technology is used to assist managers, planners, and their constituents in developing a common perspective for viewing information about our complex social and natural world.

The seventh annual conference is sponsored by the Montana GIS Users' Group, a statewide consortium of governmental agencies, universities, and businesses involved with GIS technology.

### **CONFERENCE HIGHLIGHTS:**

- **Pre-Conference Workshops:** Participants can select from eight workshops that focus on special topics of interest to GIS novices, specialists, and managers.
- **Special Attractions:** Welcoming and opening comments by Governor Marc Racicot (invited speaker), keynote address by Richard Varn, Tuesday, May 9th, and several panel discussions by GIS experts.
- **Concurrent Sessions:** Participants can select from three concurrent tracks - natural resources, applications, and local government - designed to focus on different types of GIS applications.
- **Commercial Exhibits:** Major U.S. and Canadian vendors of GIS/GPS software, hardware and services will host exhibits during the conference.
- **GIS Public Night:** The conference will be open to the general public, Monday evening, May 8th. A short talk on basic GIS concepts will be presented. Poster Presenters and vendors will be available to answer questions. Public night is *free* of charge.
- **Poster Session:** Posters and exhibits by GIS users from around the Northern Rockies will be on display throughout the conference and will be judged during the conference. The presenters will be available for questions and discussions during Public Night on Monday, as well as the no-host Tuesday evening social.
- **GIS Users' Group Meeting:** We will elect our new board and officers and hear reports from the various committees formed last year.
- **Tours:** Tours and demonstrations at local GIS facilities are scheduled for Thursday morning, May 11th. Attractions include the Montana State Library's Natural Resource Information System, the Department of Natural Resources and Conservation, and Desktop Assistance which helps nonprofit organizations to access GIS data.

For more information on program content contact Kris Larson (406/444-5691). For general conference information, contact Tom Ring (406/444-6785).

# 123 Looking Into Lotus Graphing in Lotus 1-2-3 for Windows

Graphing in Lotus 1-2-3 is no longer the tedious process it once was. Lotus 1-2-3 for Windows allows you to highlight a range of data and then choose what type of graph you wish to create. Remember to always use a one-to-one correspondence with your data. If you are using three columns for your x range of data (i.e. January, February and March) then make sure you have one y value for each of the x values. You would not want to have two values in January, three values in February and five values in March. Your graph would have no meaning as shown in Figure 1.

*"Graphing in Lotus 1-2-3 is no longer the tedious process it once was. ... Don't forget to consider the data you are trying to graph and what you wish to convey with your graph."*

If you do find yourself with this dilemma then you might want to consider averaging your values for each of the x values. Lotus provides you with the formula @AVG(xx..yy) where xx..yy is a range of values. You could average the two values in January, the three values in February, and the five values in March and arrive at a much more understandable graph. The averages appear under the months. I have

moved the values to the right. Your graph will now look something like the one in Figure 2.

These are some of the basics you need to consider when creating graphs.

Don't forget to consider the data you are trying to graph and what you wish to convey with your graph. If you have any graphing or other Lotus 1-2-3 questions call Brian Divine (444-2791) from End User Systems Support.

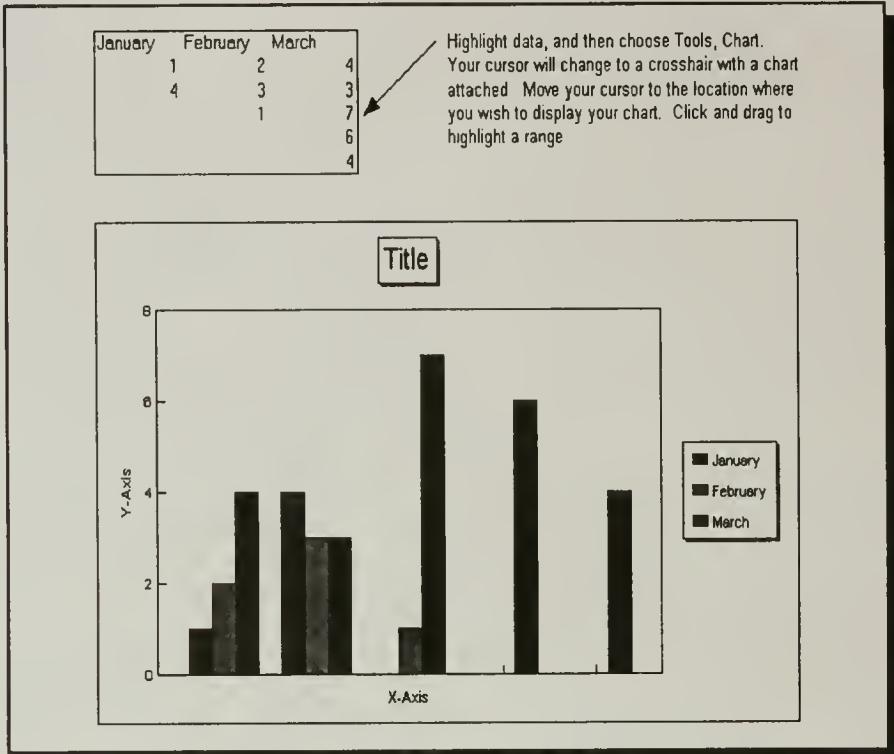


Figure 1

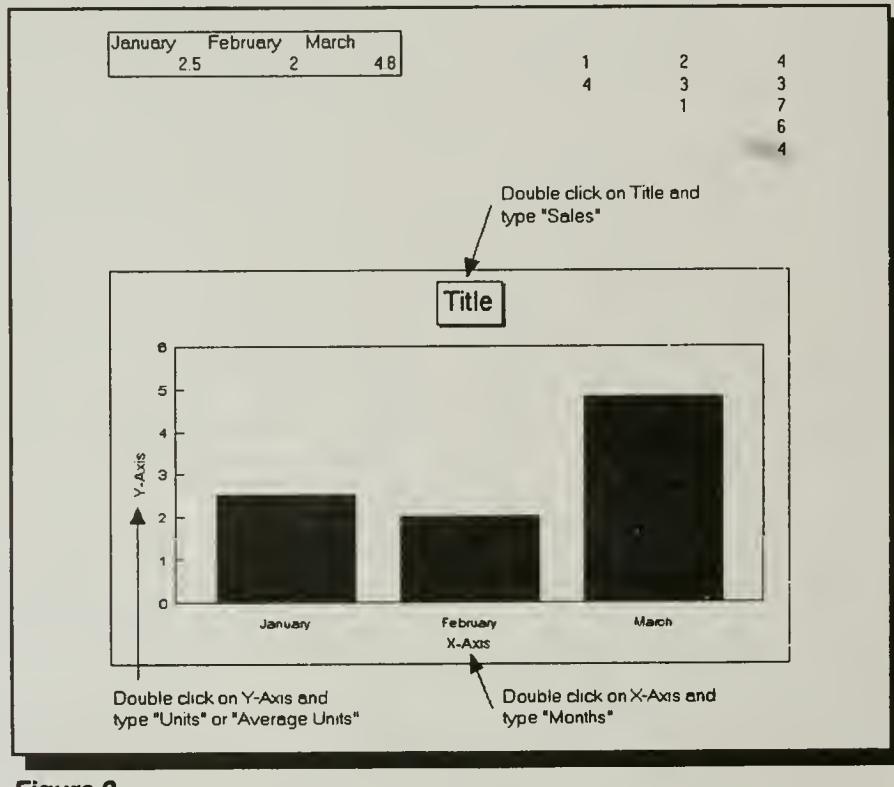


Figure 2



## **Using The Windows Clipboard With Non-Windows Applications**

How can YOU copy and paste information from the Microsoft Windows Clipboard to Non-Windows applications?

Only text based information can be pasted into Non-Windows applications. The method used to copy and paste information from the Windows Clipboard depends on how the application is running in Windows.

### **Running a Non-Windows (DOS) application Full Screen:**

To *Copy* information to the clipboard while in the Full Screen application, press [ALT][PRINT SCREEN]. This will copy all information on the screen to the Windows Clipboard for further Editing.

To *Paste* information that is present in the Clipboard while working in a Non-Windows application, perform the following steps:

1. Position the cursor at the cell where the clipboard's contents will be pasted.
2. Press [ALT][ESC] to return the system to the Window's Program Manager.

3. Click the icon representing the Non-Windows application once.
4. Click on Edit.
5. Click on Paste.
6. Double click the icon to return to the application.

### **Running a Non-Windows (DOS) application in a Window (386 enhanced mode):**

To *Copy* information to the clipboard, the entire screen can be printed as described above, or selected information can be copied to the clipboard.

To copy selected information to the clipboard perform the following steps:

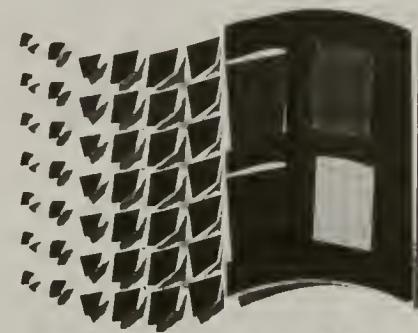
1. Highlight the desired information to be copied, using a mouse, in the Non-Windows application.
2. Click the Window Control of the application (e.g., top left symbol).
3. Select Edit.
4. Select Copy.

To *Paste* information that is present in the Windows clipboard, while running the application, perform the following steps:

1. Position the cursor at the cell where the clipboard's contents will be pasted.
2. Click on the Window Control of the application (e.g., top left symbol).
3. Select Edit.
4. Select Paste.

For more information or questions, call Jerry Kozak (444-2907) or Brian Divine (444-2791), both from End User Systems Support.

**"How can YOU copy and paste information from the Microsoft Windows Clipboard to Non-Windows applications?"**



## **WINDOWS FREEBIES!**

### **1MBFort**

Do you get that infamous message, "Insufficient Memory To Run This Application", when attempting to start an application in Windows, even though you have multi-megabytes of extended memory on your PC? *PC Magazine* has released a free utility which MAY be of help in avoiding this error - 1MBFort. But first, a technical discussion, based on information gleaned from *PC Magazine* and other sources, as to why this error may occur.

When a Windows program is started it needs about 800 bytes of DOS memory below the 640K boundary. This is because Windows is technically a DOS extender that still needs to communicate with DOS for hardware interrupts and other processes. A variety of programs and several important Windows structures may also need conventional DOS memory.

Windows allocates extended (movable) memory from the top of a PC's available memory, but it allocates conventional (fixed) memory from the bottom. Therefore, if the fixed memory allocations unnecessarily fill up the DOS memory below 640K, then programs that do need conventional

memory cannot run. That is when you get the "Insufficient Memory to Run" error, no matter how many megabytes of free extended memory your computer has.

*"Do you get that infamous message, "Insufficient Memory To Run This Application", when attempting to start an application in Windows, even though you have multi-megabytes of extended memory on your PC? PC Magazine has released a free utility which MAY be of help in avoiding this error - IMBFort."*

Most programs allocate their memory as moveable. But some things, like interrupt code and data, need to be fixed while some programs are incorrectly designated as fixed. Programs like screen savers, drivers, 386 enhanced drivers, sound, multimedia, and modem software are known to allocate conventional DOS memory when they could allocate extended (movable) memory instead. If Windows cannot allocate a block of conventional memory large enough to start a process, it tries to allocate the needed memory from extended memory if possible, leaving the conventional memory region alone. So, if Windows can be tricked into believing there is not a large enough block of conventional memory available for a "moveable" allocation, it will allocate the memory from the top of available extended memory. This will leave the conventional memory for applications that must have it. This is where IMBFort comes in.

IMBFort performs some "magic" that fragments available conventional memory into small segments and reallocates them. This has the effect of not allowing large

processes to allocate large blocks of conventional memory. Instead, these processes must look to extended memory to fulfill allocation requests. An additional utility, View1MB, is included so you can look at how your PC's memory is being allocated. The following is an edited version of the documentation file that comes with IMBFort.

IMBFort (VERSION 1.0)  
Copyright © 1995, John McSorley  
First Published in *PC Magazine*  
March 29, 1995 (Utilities)

### Purpose:

Windows sometimes displays a warning message telling you that there isn't enough memory to run another program when you have plenty of memory. This is caused by a lack of low memory, memory below 1MB. IMBFort solves this problem by preventing programs from using large blocks of it. The companion utility, View1MB, lets you analyze low memory by providing information about free and allocated blocks.

*"IMBFort performs some "magic" that fragments available conventional memory into small segments and reallocates them. This has the effect of not allowing large processes to allocate large blocks of conventional memory. Instead, these processes must look to extended memory to fulfill allocation requests."*

### Setup:

To install IMBFort, just copy IMBFort.EXE into a directory on your hard disk. IMBFort then can be launched in one of two ways. You can use Program Manager to create an icon in your Windows Startup

group, or add IMBFort.EXE to the Load = line of WIN.INI. The second method is preferable, since it ensures that IMBFort is the first application started.

### Remarks:

IMBFort operates invisibly, but you can tell it is running by checking the Windows Task Manager list. Next to the IMBFort program name in Task Manager is the number and size of the fragments created. By default, the fragment size is 10,240 bytes. This usually works fine, but you can change the fragment size if you have problems launching programs.

To change the fragment size, use Windows NotePad or another plain text editor to edit the file called IMBFort.INI in your Windows directory. The block size IMBFort uses to create the fragments is set using this format:

```
[IMBFort]
BlockSize = nnnn
```

where nnnn is in the range 5000 to 20000 and indicates the block size in bytes. If you enter a value below 5000, IMBFort changes it to 5000. Likewise, values above 20000 are converted to 20000.

IMBFort can be terminated by selecting it within Task Manager and pressing the End Task button.

Studying the *PC Magazine* article of March 28, 1995 on IMBFort is HIGHLY recommended. IMBFort will not miraculously solve all your Windows memory management problems. Most major applications handle memory properly, but if you use smaller applications, a lot of VBX objects and such, IMBFort may help.

To receive a copy of IMBFort and View1MB contact Denny Knapp (444-2072) of End User Systems Support, by phone or via ZIP!Mail.



## **ZIP!Tips Seeing Double???**

With over 3,850 plus names currently listed in the ZIP! Address Book, undoubtedly duplicate names are listed. Have you checked out the "Smith" section lately? Two Kim's, two Jack's, etc.

We can help clearly identify a specific user by adding the agency's initials in parenthesis after the name in the Address Book. For example:

Smith, Joe (DOA)  
Smith, Joe (PSC)

This correction needs to be requested by the person or the E-Mail administrator in that particular agency.

If you run into a double occurrence where no agency is specified, you can get the agency information to correctly select the appropriate recipient. In ZIP!Mail, when choosing Recipients, highlight the person's name and select Show. This will bring up a screen displaying the following information:

User ID:	CX0000
Address:	ZIP00X
Name:	Smith, Joe
Phone:	444-0000
Description:	Department Name

Reading the department name of the individual clarifies that this is indeed the person you want to select as the recipient.

*"We can help clearly identify a specific user by adding the agency's initials in parenthesis after the name in the Address Book. ... This correction needs to be requested by the person or the E-Mail administrator in that particular agency."*

In ZIP!Office, the steps are similar. After clicking on the "Select Addressee's Names" icon, highlight the name in question and click once on the Show button. A pop-up window displays Address book details on that individual.

Anytime a user terminates employment with an agency, it is important to let ISD know. We need to remove their name from the Address Book. Otherwise, if they become employed by another State agency, a dual listing in the Address Book will occur.

If you have any questions regarding duplicate listings in the ZIP! Address Book, please call (or preferably ZIP!) Sue Skuletich (444-1392) of End User Systems Support.

*"Anytime a user terminates employment with an agency, it is important to let ISD know. We need to remove their name from the Address Book. Otherwise, if they become employed by another State agency, a dual listing in the Address Book will occur."*



## **Using Colors in WordPerfect 5.1 on a Black- and-White Printer**

If you're like most WordPerfect users, you haven't played with the Print Color feature of WordPerfect 5.1. Most users assume that since they don't have a color printer, then this feature doesn't apply to them. However, if you have a black-and-white laser printer which supports the Color Feature, you can print various shades of gray, and in several fill patterns. Printers which support this feature include the HP LaserJet IID, IISi, IIIP, 4, 4Si, and several other printers from various manufacturers.

First, let's start with gray shading:

- Choose a scalable, bold font by pressing Font (CTRL-F8)
- Base Font (4), highlighting the font you want
- Then pressing Select (I)
- Type the Desired Point Size, such as 100, and then press Enter
- Now, select a print color
- Press Font (CTRL-F8) and then select Print Color (5)
- Pick a color by pressing the corresponding number or letter
- Right now, try Green (4), and then press Exit (F7).

To see what text written in this color looks like, type a sample word or phrase in your document. If you

look in Reveal Codes, you will see the [Color:Green] code has been added before the text. Now, press Print (Shift-F7) and then 1, for full document. You should get a shade of gray similar to the one printed below for green.



In addition, you will notice six other examples above, Fill 1 through Fill 6. These are selected in a similar fashion to the other Colors. To select a fill pattern:

- Press Font (Ctrl-F8), Color (5), and then Other (O)
- Type the appropriate Fill number in the Red Column, and Zeros in the Green and Blue Columns
- When you are finished Press exit (F7).

Try typing some sample text and printing it.

Note: The Fill patterns are only available in 5.1 printer drivers dated 11/5/91 or later. If the fill patterns don't work on your computer, you might want to check the printer driver's version. To check the date of your printer driver, press Print (Shift-F7), Select Printer (S), highlight your printer, and then press Help (6). Your printer driver version will be at the top of the screen. Press

Exit (F7) three times to return to the document screen.

One last item. You can combine Print Color with other effects like shadow and outline to get a different look:

## **Shadow Outline**

If you have any questions about WordPerfect, contact Sue Skuletic (444-1392) or Forrest Christian (444-2921) of End Users Systems Support.



## **WordPerfect WordPerfect for Windows 6.1 Supported by ISD**

If you have been using WordPerfect for Windows 6.0 (WPWIN 6.0) and seem to *General Protection Fault* more often than not, relax -- WordPerfect for Windows 6.1 has arrived!

### **Problems/Concerns**

Several state agencies have expressed concerns regarding problems with WordPerfect's release

of WPWIN 6.0 including the interim fix releases of 6.0a and 6.0a "p.m.". The most notable problems are stability, speed, WordPerfect 5.1 file format compatibility and Windows resource utilization.

### **6.1 Resolves Problems**

Over the last few months, while working closely with the Information Technology Managers Group (ITMG) Enterprise Software sub-committee and the NetWare Managers group (NMG), ISD has been identifying the problems statewide and conveying the concerns to Novell/WordPerfect. Initial testing and evaluation of WPWIN 6.1 revealed a much more stable and usable Windows word processor. If your agency is currently using WPWIN 6.0 we recommend upgrading to version 6.1 as the newer version appears to resolve most of the major concerns.

### **Software Survey Results in Free Upgrades**

The ITMG Enterprise Software subcommittee conducted a software survey of all state agencies in November 1994. The resulting numbers of WPWIN 6.0 licenses were used in negotiations with Novell/WordPerfect. ISD successfully came to an agreement with Novell/WordPerfect that allows existing WPWIN 6.0 licenses to be upgraded to WPWIN 6.1 at no cost. The results of the software survey will be used to determine how many upgrades an individual agency is entitled to receive.

### **DOS Versions Still Supported**

If you are using a DOS based version of WordPerfect, ISD will still provide full support for WordPerfect 5.0 and 5.1.

Watch for WPWIN 6.1 feature

articles in future editions of *ISD News & Views*. If you have any questions concerning WordPerfect for Windows or the number of upgrades your agency is eligible for, please call Kyle Wynn (444-2859) of End User Systems Support.



## **Term Contract Status**

### **HP Contract Renewed**

Effective March 10, 1995

The term contract for HP LaserJet and DeskJet printers with ComputerLand of Western Montana has been renewed for an additional year. The latest price lists will be distributed in early April.

### **Dell Presentations**

April 27

Dell representatives will be in town to present their new products, which include servers, PC's, and hot new notebooks (non-disclosure). Also included in the presentation will be information regarding Windows 95, with a question and answer session to follow. Two sessions will be held at the Colonial on Thursday, April

27. The first will be from 9:00-12:00, and the second will be from 1:00-4:00. Seating is limited, so please RSVP by calling Scott Mangum (800/274-7799 ext. 66226). See you there!

## **Digital/Wyle Support**

### Local Rep

John Morris of Wyle, Digital's marketing group, is now located in Helena. John will support state agencies with pricing, configurations, support problems, and such. He can be contacted at 449-6057.

## **Suggestions**

We are constantly searching for new ideas that could enhance *ISD News & Views*. Perhaps there are subjects you would like to see covered in future articles, or maybe you just wish to share comments on *ISD News & Views*. We would like to hear from you.

Our goal is to present a vehicle, which provides information of common interest, to all agencies within state government. Please share with us any ideas you have that will enable us to keep pace in an ever changing environment. To share your ideas, please contact the editors of *ISD News & Views*.

## **Distribution Notes**

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## **ISD Customer Support Center 444-2000**

Got a problem (opportunity)? Do you need ISD assistance for any of your information processing requirements? Then contact the ISD Customer Support Center (formerly the Network Assistance Center), which is our central point of contact.

## **Deadline/Editor's Note**

If you would like to submit an article to *ISD News & Views* for publication, please send it to Curt Secker or Irv Vavruska, preferably via ZIP!Mail. Please have your article in by the date listed below for inclusion in the corresponding month:

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